REMARKS/ARGUMENTS

Claims 1-7, 15 and 16 are pending herein. Claim 16 has been added hereby as supported by claims 1, 3 and 7, and throughout the specification. Applicant respectfully submits that no new matter has been added.

1. Claims 1-2, 4-6 and 15 were rejected under §102(b) over Hesse et al., U.S. Patent 5,274,571. This rejection is respectfully traversed.

Claim 1 recites a method for running an electric energy storage system which is set up at an electric energy consumer, wherein a running pattern of charge and discharge of the electric energy storage system is previously programmed and the run of the electric energy storage system is controlled on the basis of the previously programmed running program.

Page 35, paragraph [0052] to page 36, paragraph [0055] of the present specification discloses one example of the steps used to determine the program for the electric energy storage system of the present invention. The first step is to research into electric energy consumption by the electric energy consumer for a predetermined period, e.g., at least one past year, so as to be used as base data for determining a scale, and a running pattern, for the electric energy storage system. The second step is to research into an electric fee system arranged by an electric energy supplier. The third step is to determine: (a) a scale of the electric energy storage system on the basis of a date set for a contract electricity; b) electric energy consumption on the day having the peak of the maximum load; c) a day having the highest peak of electric energy consumption; and d) a specification of the electric energy storage system expected to be introduced. The fourth step, as disclosed in paragraph [0055], is to determine a running program for discharging the electric energy storage system. The running pattern program is planned according to the past records of the electric energy consumption, and operation of the electric energy storage system is then controlled on the basis of the previously programmed running pattern.

Hesse discloses an energy storage scheduling system which is set up at an electric energy consumer and capable of controlling electrical energy to be purchased by controlling charge and discharge. However, Applicant respectfully submits that Hesse does not teach or suggest that a running pattern of charge and discharge of the electric energy storage system is previously programmed and the run of the electric energy storage system is controlled on the basis of the previously programmed running pattern, as recited in pending claim 1.

Col. 4, lines 20-36 of Hesse as cited by the PTO disclose that scheduler 8 instructs equipment controls 11 to charge the storage device 10 at a specified time and that, without the scheduler providing supervisory scheduling information, the equipment controls would usually charge the storage device at a predetermined time regardless of the cost.

Col. 6, lines 10-40 of Hesse disclose the information used by the controller to determine when to charge the storage device including the cost of the electrical energy, the current level of stored energy and information predictive of energy demand of load systems during each hour, fractional hour, or other time increment. In other words, Hesse does not teach that the run of the electric energy storage system is controlled on the basis of the previously programmed running pattern (as claimed), but rather on the basis of current information and the *predicted* running pattern.

Accordingly, Applicant respectfully submits that claim 1 defines patentable subject matter over Hesse, and thus is in condition for allowance.

Claims 2, 4-6 and 15 depend from claim 1 which Applicant respectfully submits is in condition for allowance for at least the foregoing reasons. Accordingly, Applicant respectfully submits that claims 2, 4-6 and 15 define patentable subject matter over Hesse, and thus are in condition for allowance.

2. Claim 3 was rejected under §103(a) over Hesse and claim 7 was rejected under §103(a) over Hesse in view of Suzuki et al. These rejections are respectfully traversed.

Claim 3 recites that the running pattern of the electric energy storage system is programmed so that a consumption rate of electric energy stored in the electric energy storage system becomes 80% or more. The PTO argued that it would have been obvious to a skilled artisan to make the consumption rate of the energy stored in the electric energy storage system 80% or more to allow for less dependence on power directly from utility suppliers. Applicant respectfully submits that it would not have been obvious to make the energy consumption rate 80% in the energy scheduling storage system disclosed by Hesse. The 80% requirement recited in claim 3 is not a function of dependence on power supplied from utility suppliers, but rather is a function of the structure of the electric energy storage device used in the electric energy storage system, in this case, the sodium sulfur battery as recited in claim 7. Applicant respectfully submits that there is no suggestion in Hesse to set the consumption rate of the stored electric energy to be more compatible with the energy storage device employed.

In the Office Action mailed March 2, 2004, the PTO argued that the "Applicant fails to appreciate the breadth of the claims as presently amended" because the "features which applicant relies (i.e., using an 80% consumption rate to maintain a high temperature in a sodium sulfur battery to ensure proper operation) are not recited in the rejected claim(s)." However, Applicant respectfully submits that there is no requirement that the unexpected results attributable to the claimed invention be recited in the claims.

In addition, claims 3 and 7 depend from claim 1 which Applicant respectfully submits is in condition for allowance for at least the foregoing reasons. Accordingly, Applicant respectfully submits that claims 3 and 7 define patentable subject matter over the prior art as presently pending and thus are in condition for allowance.

3. Claim 16 has been added as supported by claims 1, 3 and 7 and recites a method for running an electric energy storage system using a sodium sulfur battery which is set up at an electric energy consumer, capable of controlling electric energy to be purchased by the electric energy consumer by controlling charge and discharge, wherein a running pattern of charge and discharge of the electric energy storage system is previously programmed, and the run of the electric energy storage system is controlled on the basis of the previously programmed running pattern so that a consumption rate of electric energy stored in the electric energy storage system becomes 80% or more.

Applicant respectfully submits that the prior art does not teach or suggest a method for running an electric energy storage system using a sodium sulfur battery set up at an electric energy consumer wherein a running pattern of charge and discharge of the electric energy storage system is previously programmed and the run of the electric energy storage system is controlled on the basis of the previously programmed running pattern so that the consumption rate of electric energy stored in the electric energy storage system becomes 80% or more. As previously argued, Hesse discloses an energy storage scheduling system wherein the run of the electric energy storage system is controlled on the basis of current information and the predicted running pattern. Additionally, Hesse does not teach or suggest an electric energy storage system using a sodium sulfur battery or controlling the run of the electric energy storage system so that a consumption rate of electric energy stored in the electric energy storage system is 80% or more. Accordingly, Applicant respectfully submits that claim 16 defines patentable subject matter over the prior art, and thus is in condition for allowance.

For at least the foregoing reasons, Applicant respectfully submits that this application is in condition for allowance. Accordingly, the PTO is requested to issue a Notice of Allowance as soon as possible.

Applicant respectfully requests that the PTO acknowledge receipt and consideration of the references cited in the Information Disclosure Statement filed October 18, 2004.

If the Examiner believes that contact with Applicant's attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicant's attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

November 5, 2004

Date

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